

10/683,625

PATENTAMENDMENT A (IN RESPONSE TO PAPER NO. 20041206
(OFFICE ACTION DATED DECEMBER 10, 2004))CLAIMS

1. *(CANCELLED)*
2. *(CANCELLED)*
3. *(CANCELLED)*
4. *(CANCELLED)*
5. *(CANCELLED)*
6. *(CANCELLED)*

7. *(ORIGINAL)* An apparatus including an electrostatic discharge (ESD) protection structure with a diac, comprising:
 - one or more reference electrodes;
 - a circuit electrode;
 - a semiconductor material of a first conductivity type in electrical communication with one or more of said one or more reference electrodes;
 - a first semiconductor region of said first conductivity type disposed on said semiconductor material and in electrical communication with at least one of said one or more reference electrodes;
 - a second semiconductor region of a second conductivity type disposed on said semiconductor material proximate said first semiconductor region and in electrical communication with said at least one of said one or more reference electrodes;
 - a first semiconductor well of said second conductivity type disposed in said semiconductor material;
 - a second semiconductor well of said second conductivity type disposed in said first semiconductor well;
 - a third semiconductor well of said first conductivity type disposed in said second semiconductor well;

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a third semiconductor region of said first conductivity type disposed on said third semiconductor well and in electrical communication with said circuit electrode; and

a fourth semiconductor region of said second conductivity type disposed on said third semiconductor well and in electrical communication with said circuit electrode.

8. *(ORIGINAL)* The apparatus of claim 7, wherein:

said first conductivity type comprises P-type; and
said second conductivity type comprises N-type.

9. *(ORIGINAL)* The apparatus of claim 7, wherein:

each of said semiconductor material, said third semiconductor well, and
said first and third semiconductor regions has a respective dopant concentration;
and

said first and third semiconductor region dopant concentrations are greater
than said semiconductor material and third semiconductor well dopant
concentrations, respectively.

10. *(ORIGINAL)* The apparatus of claim 7, wherein said semiconductor
material comprises a substrate for an integrated circuit.

11. *(ORIGINAL)* The apparatus of claim 7, further comprising a
substrate for an integrated circuit, wherein said semiconductor material is disposed
on said integrated circuit substrate.

12. *(ORIGINAL)* The apparatus of claim 7, wherein said circuit
electrode comprises a signal interface for said integrated circuit.

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13. *(CANCELLED)*
14. *(CANCELLED)*
15. *(CANCELLED)*
16. *(CANCELLED)*
17. *(CANCELLED)*
18. *(CANCELLED)*

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